

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 93 - 089

WASTE DISCHARGE REQUIREMENTS FOR:

SKYWALKER RANCH (LUCASFILM, LTD.)
5858 LUCAS VALLEY ROAD
MARIN COUNTY

FINDINGS

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter called the Board, finds that:

1. Lucasfilm, Ltd. (hereinafter discharger) submitted a Report of Waste Discharge, dated January 27, 1993, for the expansion of their waste discharge disposal system at Skywalker Ranch (formerly Bulltail Ranch), a retreat located at 5858 Lucas Valley Road, Marin County.
2. Currently Skywalker Ranch has three septic waste disposal systems which provide treatment as described below:
 - a. Waste 001 (Main Meadow):

Up to 4,900 gallons per day (gpd) of sanitary sewage is generated from a maximum of 250 daytime users. The waste is discharged from offices, a technical building, the Archives Building and the Main House into a septic tank and leachfield system. Low-flow plumbing fixtures were installed in 1991 and 1992 throughout these buildings to reduce the waste flows by about 25 % from previously permitted flows of 6,250 gpd.

The disposal system is referred to as the Main Meadow system. This system is composed of standard septic tanks and a dual leachfield system. The leachfield was placed in a partially filled area which was compacted and planted with grass approximately three years prior to the dual leachfield installation. The capacity of each leachfield is 6,250 gpd. A total disposal area of 12,500 gpd is available if both leachfields are in operation simultaneously. Flows to the leachfield are regulated by a series of dosing siphons which serve to alternate the flow to different sections of the leachfield as needed to optimize the performance of the system. This leachfield also receives up to 2,475 gpd from the Recreation and Archive Buildings (see Waste 003) during the months of October through April.

b. Waste 002 (Farm Group):

Approximately 1600 gpd of sanitary sewage is generated from a group of buildings known as the Farm Group.

This disposal system is composed of a conventional septic tank and leachfield and has been previously approved by the Marin County Health Department. The capacity of the septic tank and leachfield system is 2400 gpd. The flows and the treatment disposal facilities for Waste 002 are proposed to be modified as discussed in Finding # 3 below.

c. Waste 003:

Up to 2,475 gpd of sanitary sewage is generated from the Recreation Building. This building is used by up to about 100 people daily, with occasional meetings of larger groups.

The wastewater system includes a septic tank, a 4,000-gallon grease interceptor and a shallow pressure-dosed leachfield with a capacity of about 2,230 gpd, which provides part of the disposal capacity for the system. The leachfield is used for five months of the year only (May through September). During October through April the wastewater is discharged to the Main Meadow system to utilize the surplus capacity in that system (see Waste 001 above).

3. Skywalker Ranch is undertaking modifications to and expansion of the Farm Group complex which will interfere with the existing leachfield (waste 002) and will also generate additional domestic wastewater for treatment and disposal. It is estimated that the Farm Group wastewater flows will increase from their present 1,600 gpd to 2,800 gpd, with occasional peak flows as high as 4,000 gpd. To accommodate the changes, the discharger proposes to modify and expand the existing Farm Group wastewater facilities as follows: (a) the existing leachfield will be abandoned; (b) the existing 6,000 gallon septic tank will remain in use for primary treatment; (c) a recirculating sand/gravel filter with a capacity of 4,000 gpd will be added to provide advanced secondary treatment; (d) a duplex pumping station and transmission line will convey the treated wastewater to a new leachfield site located to the east of the Main Entrance Gate; and, (e) a new, dual pressure-dosed leachfield will provide final effluent disposal in an area approximately 1,000 feet east of the Main Entrance Gate. The leachfield will consist of a total of 2,050 lineal feet of trench, 52-inches deep, with a capacity of 4,000 gpd for each half of the dual field.
4. A domestic water well is located alongside Nicasio Creek, approximately 175 feet southwest of the edge of the proposed Farm Group leachfield.
5. Due to the proximity of the water well described in Finding 4 above, nitrate loading to the groundwater was analyzed in the January 1993 report for the Farm Group leachfield. A supplemental nitrate analysis was submitted on June 14, 1993. The analyses estimated

that the proposed wastewater disposal system could cause the groundwater nitrate-nitrogen concentrations to increase to approximately 5 mg/l within the limits of the Skywalker Ranch property.

6. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on September 16, 1992, and it was approved by the State Water Resources Control Board on April 27, 1993. The Basin Plan contains water quality objectives and beneficial uses for Central San Francisco Bay and contiguous waters. The Basin Plan prohibits the discharge of wastewater with particular constituents of concern to beneficial uses, into non-tidal waters. The Basin Plan also requires that existing groundwater quality be maintained unless otherwise provided by the State Board.
7. The beneficial uses for Nicasio Creek as set forth in the Basin Plan include:
 - a. Water contact water recreation
 - b. Non-contact water recreation
 - c. Cold fresh water habitat
 - d. Wildlife habitat
 - e. Fish migration
 - f. Fish spawning
 - g. Municipal and domestic water supply
 - h. Fresh water replenishment
8. The County of Marin found and determined on the basis of an Initial Study that the project, as described, will have no substantial adverse effect on the environment, and therefore adopted a Negative Declaration regarding this project, dated October 2, 1979 in accordance with California Environmental Quality Act (Public Resources Code Section 2100 et. seq.).
9. Adoption of waste discharge requirements is exempt from provisions of the California Environmental Quality Act (Public Resources Code, Section 2100 et. seq.) pursuant to Section 13389 of the California Water Code.
10. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with the opportunity for a public hearing and opportunity to submit their written views and recommendations.
11. The Board, in a properly-noticed public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Lucasfilm, Ltd., in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Prohibitions

1. All waste shall be kept below ground surface at all times.
2. Wastewater shall not be discharged to waters of the State, via either surface flow or surfacing after percolation.
3. The discharge of waste other than domestic wastes is prohibited.
4. The volume of wastewater discharged to the leachfields shall not exceed the following:

a. Waste 001: 4900 gpd

(A five-day average shall be calculated weekly, Monday through Friday, by measuring water usage and subtracting 5% for uses which do not enter the septic system. If it proves infeasible to monitor the water meters on a 5-day basis, the discharger may elect the more conservative approach of calculating a five day average from a weekly (7 day) reading.

Eight months after the inhabitation of the Recreation and Archives buildings, the volume of Waste 001 shall return to its previous limit of 6,250 gpd.

b. Waste 002: 4,000 gpd (monthly average of weekly flows).

c. Waste 003: 2,475 gpd

B. Discharge Specifications

1. The treatment or disposal of waste shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
2. The disposal of waste shall not cause degradation of ground or surface water suitable for domestic water supply or cause an increase in any water quality parameter that would impair beneficial uses of said waters.
3. Nitrate-nitrogen concentrations in the ground water at the Skywalker Ranch property line down gradient of the Farm Group leachfield shall not significantly exceed levels predicted by the nitrogen impact analysis in Finding 5.

C. Provisions

1. The discharger shall comply with all sections of this Order immediately upon adoption.
2. The discharger shall install leachfield monitoring well systems to monitor the performance of the disposal systems and their impacts on water quality. A proposed monitoring plan shall be submitted to the Regional Board for approval by the Executive Officer by October 15, 1993.
3. A separate set of ground water monitoring wells shall be installed near the discharger's property line between the Farm Group leachfield and the adjacent property owner's water well to monitor off-site movement and concentration of nitrate-nitrogen in the groundwater. A well construction and monitoring plan shall be submitted to the Regional Board for approval by the Executive Officer by October 15, 1993. It should include a contingency plan for addressing and correcting wastewater disposal at this location in the event nitrate-nitrogen levels reach 7.0 mg/l.
4. The discharger shall maintain in good working order and operate as efficiently as possible any treatment, disposal, and monitoring facility or control system installed by the discharger to achieve compliance with these waste discharge requirements.
5. The discharger shall comply with the self-monitoring program and the attached "Provisions and Reporting Requirements," dated August 1993.
6. The discharger shall permit the Regional Board or its authorized representative in accordance with California Water Code Section 13267(c):
 - a. Entry upon premises in which an effluent source is located or in which any required records are kept;
 - b. Access to copy any records required to be kept under the terms and conditions of this Order;
 - c. Inspection of monitoring equipment or records; and
 - d. Sampling of any discharge.
7. The discharger shall file with the Regional Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location or volume of the discharge.

8. This Board will review this Order periodically and may revise the requirements as necessary.
9. This Order supersedes Order No. 91-132. Order No. 91-132 is hereby rescinded.

I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of the Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on August 18, 1993.

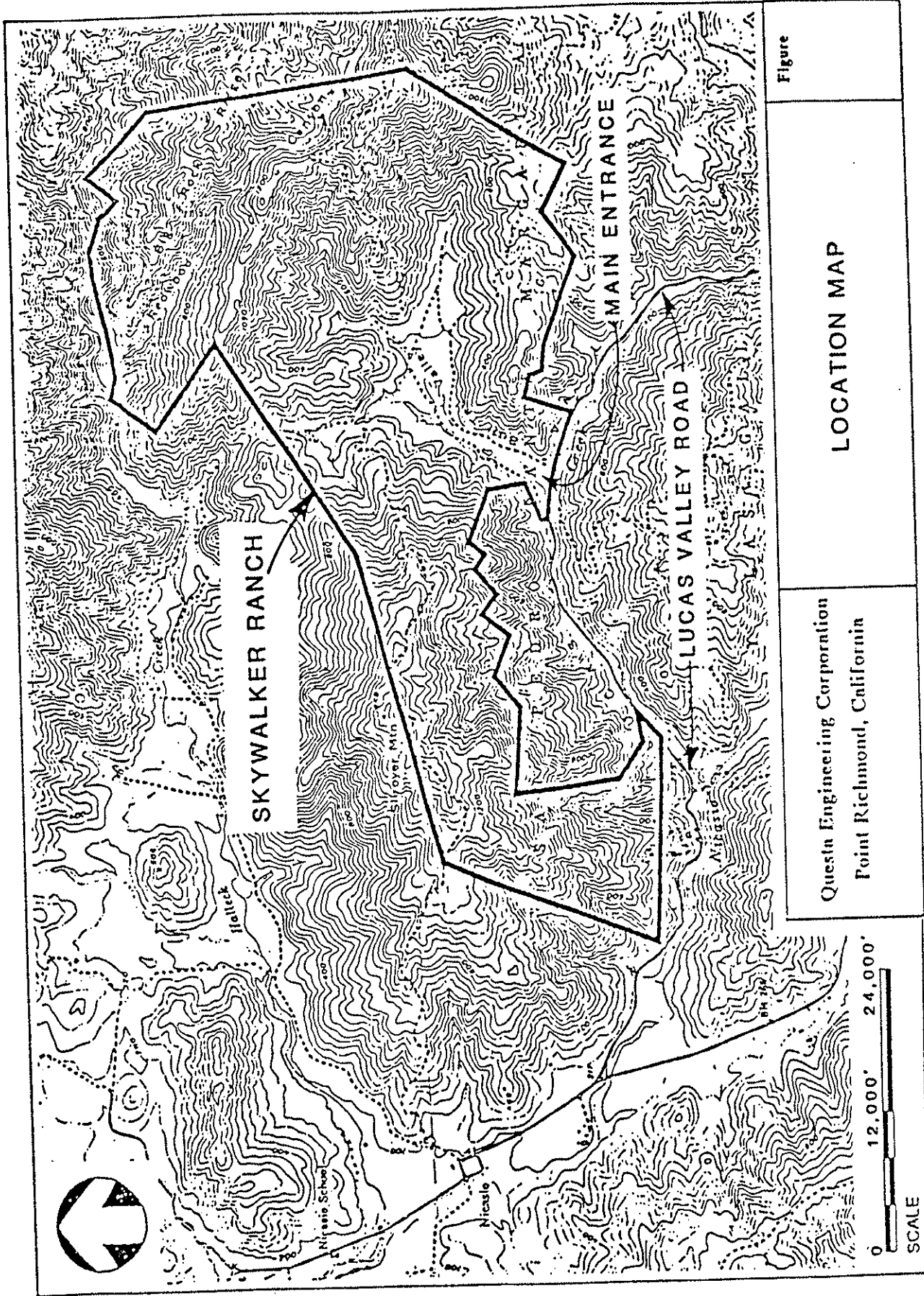


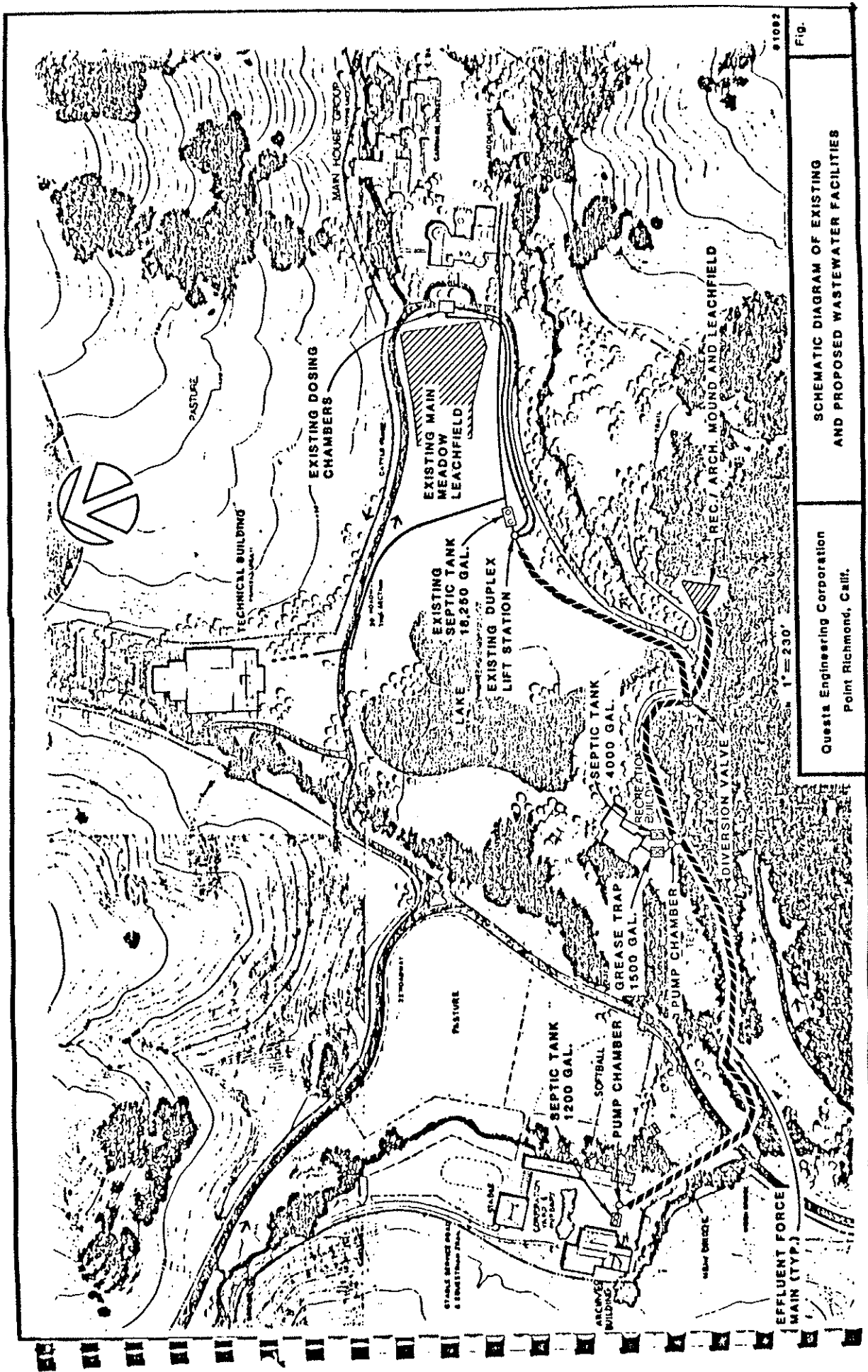
Steven R. Ritchie
EXECUTIVE OFFICER

Attachments:

Location Map
Self-Monitoring Program
Provisions and Reporting Requirements, August 1993

File No. 2159.5119
Originator/MEG
Reviewer/RJC





SCHEMATIC DIAGRAM OF EXISTING
AND PROPOSED WASTEWATER FACILITIES

Questa Engineering Corporation
Point Richmond, Calif.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

LUCASFILM, LTD (SKYWALKER RANCH)
MARIN COUNTY

WDR ORDER NO. 93-089

Consists of

PART A
(General Provisions), dated August 1993

and

PART B
(Specific monitoring requirements)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

PART A

I. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16. The principal purposes of a self-monitoring program are:

1. To document compliance with waste discharge requirements and prohibitions established by this Regional Board; and
2. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge.

II. DESCRIPTION OF SAMPLING AND OBSERVATION

- A. A five-day average shall be calculated weekly for each disposal system, Monday through Friday, by measuring water usage and subtracting 5% for uses which do not enter the septic system. If it proves infeasible to monitor the water meters on a 5-day basis, the discharger may elect the more conservative approach of calculating a five day average from a weekly (7 day) reading).

III. REPORTS TO BE FILED WITH THE BOARD

B. Violations of Requirements

In the event the discharger is unable to comply with the conditions of the waste discharge requirements due to:

- (a) maintenance work, power failures, or breakdown of waste treatment equipment; or
- (b) bypassing of untreated or partially treated wastewater; or
- (c) accidents caused by human error or negligence; or

(d) other causes such as acts of nature;

the discharger shall notify the Board office by telephone (415-464-1255) as soon as he or his agents have knowledge of the incident and shall confirm this notification in writing within two weeks of the telephone notification. The written report shall include pertinent information explaining reasons for the noncompliance and shall indicate what steps were taken to prevent the problem from recurring.

C. Self-Monitoring Reports

Written reports shall be filed regularly for each calendar quarter and submitted by the fifteenth day of the following month (i.e. April 15, July 15, October 15, and January 15). The reports shall include:

1. Letter of Transmittal

A letter transmitting self-monitoring reports shall accompany each report. Such a letter shall include a discussion of requirement violations found during the past quarter and actions taken or planned for correcting violations, such as plant operation modifications. The letter transmitting monitoring reports shall be signed by a responsible official. The letter shall contain a statement by the official that to the best of the signer's knowledge the report is true and correct.

2. Data

All results observed or analyzed in section II.


3. Map

A map shall accompany the report, showing the location of the disposal areas.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No.
2. Is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.


Steven R. Ritchie
Executive Officer

Effective Date 8/18/93